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second, the presence of the interpreter. As we have seen, Mangma is an extremely insecure, sensitive, and easily hurt person, who has deep unconscious cravings to be loved, together with a conviction that these desires will not be fulfilled. It is not unlikely that such an attitude dominates his relationship to the ethnographer, whom he undoubtedly regards as a very rich and powerful individual. The presence of the interpreter is a factor that undoubtedly distorts Mangma's story. Mangma will not tell anything about himself that will be disparaging either to his manhood or to his general standing. His account is therefore a rather stultified and unspontaneous affair until after he has got somewhat better accustomed to the situation. He eases up in his account toward the end.

That he was eager to make a good impression on the ethnographer and sought to express his affection for her is well illustrated by a dream that he narrates toward the end of his story (December 16), in which he is stealing a squash from the enclosed garden of his grandmother. It so happens that the ethnographer was the only person in the whole community who had an enclosed garden. The dream of stealing from her is therefore his characteristic way of expressing the wish to be fed by her, and also the conviction that this will not happen; hence the stealing.

Because of these two factors, Mangma's story is full of great gaps, and, judging from the general makeup of the man, we may assume that what he tells is actually the least objectionable part of his life story. The material of his biography takes us up to approximately eighteen years before the narration. The story he tells deals almost entirely with his past; nothing pertaining to his current life is mentioned in any way. We can therefore guess that his representation of himself is something of a bluff to hide his inadequacies, of which he is, in his inarticulate way, quite well aware.

Notwithstanding these deficiencies in the narrative, Mangma's life history is of great value. It is difficult to decide how typical Mangma is. I would venture to say that if he were typical the society could not continue to exist. We are dealing, therefore, with an extreme type of character formation under the influence of certain institutional situations. The façade of this character is misleading, for he is a person in good standing and is considered a strong, active man, and yet he does not participate much in the society. The reasons for this are all too clear. One of his claims to distinction is that he is a genealogist, but his recitations of genealogies were rapid and obscure. Careful checking by the ethnographer revealed that he was frequently inconsistent and in-

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Sahiek [the village of the dead]; that is why they did not offer me food.] If I had eaten there, I probably would have died. [Meaning of the descent into the house?] When I get wounds I'll be dizzy and unconscious; my soul will want to get up to heaven from Sahiek, but people will call me back and I shan't die. [No ladder?] This house is probably one of those in which people who died a violent death stay. They have probably had their heads or their spirit birds paid for; so they are shutting themselves in and are not wandering any more. [That is, special ceremonies have been given to placate their souls, and they are no longer malignant ghosts.]

[At this point I tried to get away from the conventional dream interpretation by using word associations. The informant did not seem to grasp the idea and insisted on long repetitions of the dream. The associations were as follows: *ladder*—top of waterfall, the place where a slain person is taken to be decapitated before head feasts are given; *mango tree*—person who has met violent death, or death from a particularly dreaded disease like smallpox; *empty house*—same as ladder; *closed door*—the dead man's door; *areca nut*—a wound; *betel*—a wound; *rat*—came down from the sky, referring to the fact that shooting stars are thought to turn into mice when they strike the earth.]

I dreamed again. I and Kolang cut bark for loincloths. We pounded it but could not make it soft, so we threw it away. I went for more. I saw Fuimai cutting down another tree for bark cloth. When I asked her for some, she said there was not much; there was only that one tree. But in her hands she had many pieces. Fuimai took the bark off the tree and put it in her basket. I woke up.

[Meaning?] Had I not thrown the bark away, the dream would mean that I would commit adultery. Fuimai did not throw away the bark; so that means she will commit adultery. [Fuimai was suspected in the village of sleeping with her young unmarried brother-in-law. Her husband was rarely at home.]

When I was small, my father cleared a big garden. Father carried me between his body and the arrows thrust into his belt. He took me thus to the garden feast. That evening when we came back he carried me in the same way. I cried when father left, but he said, "You stay here in the village; it is wartime." However, I continued to cry, so he carried me in this way. Mother too told me to stay home, but I just cried. That evening when we returned to the house, we ate the meat and rice baskets of the feast. The next day we all went to plant Mailang's rice field. I cried again and followed mother and father, so my

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153 the women corresponds with what I have found in my experience with native peoples. They are less willing to attempt the test and seem to think that it represents a task that is outside the feminine province. Only two of the group reached a 14-year level.

125 "Your results are not perhaps strictly comparable to mine, as the conditions of testing were somewhat different. Your subjects had the advantage of an interpreter and you also modified the procedure by marking the point of exit in each test. This, I think, would make the tests somewhat easier. I suppose the fact that you did not give four trials in the 12- and 14-year tests was due to a lack of test blanks. However, while the conditions were more difficult in that respect, it was compensated for by the fact that you allowed some trials to continue after a mistake had been made.

"I think that your group shows a persistence that was even greater than that shown by the Australian aborigines."

These comments, plus certain supplementary data, can in part be tabulated as follows:

125 153

No. of Cases	*Age Range*	*IQ*	*MA*	*Omitted Cases of Noncomprehension*
Men 26	18–45	97	13.7	2
Women 22	15–45	67	9.43	4

✗157 114 The unsystematized comments made by Dr. Porteus following each individual's score cannot be considered on the same level of precision or accuracy as the IQ scoring, but are of considerable interest because they were made with no knowledge of the people or the culture and therefore represent "blind" diagnoses. In some individual cases these semiliterary comments of evaluation are so acute, judging from my knowledge of the individuals, that it seems desirable to attempt some kind of summary of them. Readers may not agree with the manner in which I have categorized some of the terms employed, but in any event they will be able to reorganize them as they choose.

✗157

Negative	*Men*	*Women*	*Positive*	*Men*	*Women*
I. Nervous and anxious..	7	7	Confident	2	1
Apprehensive of error.	0	1	Improved in confidence	3	0
	–	–		–	–
	7	8		5	1
II. Poor planning or none	1	7	Planning	3	0
			Foresight	1	0
			Thoughtfulness	1	0
	–	–		–	–
	1	7		4	0

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Results of the Porteus Maze Tests

Negative	*Men*	*Women*	*Positive*	*Men*	*Women*
III. Overconfident	4	3	Alertness	2	1
Hasty	1	3	Prudence	1	0
Impatient to succeed	1	0	Stability	1	0
Reckless	0	1	Persistence	1	3
Impulsive	4	3	Concentration	1	0
Quick change of mood	0	1	Determination to succeed	1	0
Goal without study or effort	1	0			
	–	–		–	–
	11	13		7	4
IV. Slow to anticipate change	4	4	Adaptable	1	1
			Ability to learn by error	2	2
Slow to adapt	1	2	Correct overconfidence	3	0
	–	–		–	–
	5	6		6	3
Total	25	34	*Total*	22	7

In view of the questionableness of such a tabulation, I have made no attempt to calculate percentages or to spin fine-drawn analyses. But certain gross tendencies may legitimately be noted. For example, qualitative factors that seem to make for the successful completion of the test are markedly few in women. This is of course to be expected from their lower intelligence scores. It is simply a way of restating their intelligence performance in terms of emotional characteristics. It is also evident that for both men and women the predominant factors that interfere with efficient performances are anxiety and a general lack of steadiness. Despite this the men's results are relatively high, which indicates a good general level of intelligence. One wonders whether the financial problems that preoccupy men resemble sufficiently the problems of the Porteus Maze tests to account for their high score.

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157 the absence of design, composition, and action, as well as the poverty of relationship expression—the Atimelang children are in marked contrast to the previously mentioned Naskapis. The full import of such material will only be known when extensive comparative studies of children's drawings have been made.

Furthermore, over a period of one month, during which at least four boys performed from four to seven times, there was no indication of improvement or of any attempt to cope with the problems mentioned. Admittedly these performances were not numerous and consistent enough to be a fair trial. The matter is mentioned to indicate possibilities for future field workers.

Whether or not opportunities for improvement were adequately tested, the poverty of production in children's drawings might be considered as a further manifestation of the ego inadequacies and paucity of relationship expression which I have stressed as one of the characteristic aspects of personality structure in Atimelang.

125 As a further check on my estimates of children's drawings Mrs.
114 Schmidl-Waehner * was called in as a consulting expert to give her impressions of the predominant personality trends evinced in the drawings. Her judgments were based on formal elements and not on content. The task was avowedly difficult, not only because the drawings of primitive children were a new subject for her, but also because my technique was so much cruder than the one she is accustomed to use. The absence of color, the use of only one grade of pencil lead, the lack of choice in paper sizes, and the inadequacy of my observations on the position of children as they drew, as well as their relationships to each other during the sessions, all acted as handicaps in blind diagnosis. However, the marked coincidence between the expert's judgment and other findings is noteworthy.

157 The following comments were made in the course of about an hour and a half of inspection:

1. "They have a feeling of aloneness, as evinced by the lack of strong pressure in the lines and by the neatness of the line itself." (2) "They look like children who have good abilities but are apart from each

* Mrs. Schmidl-Waehner is an Austrian artist with psychoanalytic training who has studied the formal aspects of children's drawings in relation to personality. In Vienna she made longitudinal studies of subjects who were under analytic treatment. In this country she has worked on group studies in the children's wards of the psychiatric department at Bellevue and in the Pleasantville Cottage School. Mrs. Schmidl-Waehner's points of view are expressed in, "Formal Criteria for the Analysis of Children's Drawings," *The American Journal of Orthopsychiatry*, 12:95 (January 1942).

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Chapter 22

Rorschach's Experiment and the Alorese

BY EMIL OBERHOLZER *

000 The following summary covers: (1) procedure, (2) quantitative results of the test findings, (3) interpretation of affectivity, (4) variability and the individual, (5) sex differences.

PROCEDURE

114 The test was given by the ethnographer to thirty-seven Alorese, 124 seventeen males and twenty females. The scoring of the records and 125 their computations, their interpretations and the evaluation of the findings, were made subsequently by me in New York.

I hesitated to undertake this task for more than one reason. Not only was I confronted for the first time with the tests of individuals other than Europeans and Americans, but I did not know the norms of these people and had no way of working them out. I did not know the average of the numerical values for the various experimental factors. They must be widely different from ours, since there are even striking differences between the findings in the population groups of various sections of Switzerland. These differences are evident both in the experimental findings and in the psychology of these population groups as well as in the clinical pictures of mental disorders, notably schizophrenia. This is a point which Rorschach set forth in his *Psychodiagnostics* (1921).†

Among the Alorese, I do not know, for example, what is an original and what is a popular answer; I do not know the border line between a normal and a small detail, since I do not know with certainty what constitutes with them normal and small details. I even have no reliable basis for qualifying a form. I do not know with certainty what form answer is to be scored as *good* or *bad*. In working out the norms it may turn out that a form answer which I consider poor according to my experience with Europeans, is good in the Alorese, and vice versa. Or, to put it briefly, I lack the statistical basis that underlies our scoring of European material.

* I am deeply indebted to Margaret Wing of New York, who gave so lavishly of her time and linguistic acumen to this chapter.

† See English translation, pp. 96-97, 107, and 112, published by Hans Huber, Berne, Switzerland, 1942; distributed in the U.S.A. by Grune & Stratton, Inc., New York.

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Despite this deficiency in the fundamentals which are indispensable from a methodological standpoint for a systematic study of this kind, I undertook the task, since there existed no possibility of complying with those requirements in the case of the Alorese. There are no more than thirty-seven Rorschachs and they are not likely to be increased in number. To work out norms we need at least some hundred or more tests, perhaps more than there are Atimelangers. There is little hope that standards will ever be established.

I looked around, therefore, for some other way of solving this problem. The psychological meaning and significance of Rorschach's experimental factors have proved true for Europeans and Americans. I consequently applied these principles to a few Alorese and checked the results with the ethnographer's statements concerning the psychological background of these individuals. Many hours were spent assigning rank order to subjects for personality traits. The ethnographer worked from her knowledge of the individuals; I worked blind from the Rorschach materials. The degree of coincidence between our ranking was so high that it left no doubt that the principles of the test could be applied cross-culturally.

It was much harder to discover what the Alorese have in common among themselves and in what respects their mentality differs from that of Europeans and Americans. The common features of their findings strike the eye from the beginning and seem to cover up individual variations. I had to get at what was new to me in their tests. For this purpose I had to resort to similar manifestations in psychopathology, to borrow from it, and finally to combine a whole set of considerations. That means that the approach to what the Alorese have in common was only possible by comparison and analogy and by modifying the conclusions I had reached on this basis. I shall return to this subject when we deal with these unfamiliar features in their records and with the implications of these features for the life of the emotions.

Resorting to analogy, I believe, was justified—all the more so since this material is excellent in itself, even though there are some shortcomings which are unavoidable. Among several hundred answers there are some which cannot be classified as movement, form, or color responses but may be all three of them. There are others that cannot be located, so they have to be eliminated. It is not easy to give a test correctly and to record everything that belongs in it; this difficulty is obviously increased when one is working with primitive peoples. Some records of Papuans of New Guinea transmitted to me by Dr. David Levy, who first introduced Rorschach's experiment in America, could not be scored

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114 because the precise location of the greater number of the answers was missing.

114 128 The scoring of the thirty-seven Alorese cases cannot be presented in detail, but it is possible to summarize the responses and the findings by categories. I must confine myself to some general statements based first of all, though not exclusively, on the seventeen male Rorschachs. The findings of the females are of the same type, exhibiting, on the whole, even more than those of the male Alorese, the striking peculiarities of their tests and those factors in which they differ from Americans and Europeans.

125 QUANTITATIVE RESULTS OF THE TEST FINDINGS

The experimental records are examined according to the following scheme:

1. How many responses are produced? What is the reaction time?

2. Is the picture conceived and interpreted as a whole or in parts, and which are the parts interpreted?

3. Is the answer determined only by the form, or is there also a movement or color element in it?

4. How is this whole picture, or any part of it, interpreted as regards content?

The results of the whole-part issue in the male Alorese are these:

TOTAL NUMBER OF RESPONSES: 496

		Male Alorese	*Male Swiss*
W	(whole answers)	87 (55—) = 17.5% ∓	30.2% ±
D	(normal details)	288 = 58.1%	61.9%
Dd	(small and unusual details)	121 (61—) = 24.4% ∓	6.9% ±
		496	

One among the above-stated Dd is also a Do (see later the average findings). The signs ± and ∓ mean predominance of good forms, and vice versa.

128 117 When I compare the Alorese with Europeans I refer only to Swiss for statistical purposes, since Europeans other than Swiss are considerably in the minority among my normal material—normal, that is to say, in the sense of showing no peculiarities, or only a minimum of them.

125 In combination with other experimental factors the proportion of whole, detail, and small detail answers and the quality of the forms (F+ and F—) are first of all, though not exclusively, the represents-

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	Male Alorese		*Male Swiss*	
F(C)	18 = 13.4%		19.7%	
FC	3 = 2.2%		56.0%	
CF	72 = 53.7%	32.2%	21.6%	20.5%
		21.6% bl-wh		1.1% bl-wh
		32.8%		2.5%
C	41 = 30.6%	11.2% bl-wh	1.7%	0.43% bl-wh
		19.4%		1.28%
	134			

In the normal Swiss the FC responses make up more than half of all the color reactions, namely, 56.0% in the males and 50.0% in the females; in the Alorese they represent only 2.2% and 6.6% respectively. Among the seventeen male Alorese there are only three who give one FC response apiece, and one of these responses is questionable. There is no FC, not even a slight indication of one, in the findings of the fourteen others. This lack of FC occurs in Europeans only in pathological conditions, primarily in schizophrenics, depressives, neurotics, and unintelligents.

Further, in the Alorese the total percentage of color reactions that are CF and C is about 3.5 times greater than in the Swiss — 84.3% in the males and 84.0% in the females as opposed to 24.3% and 27.8% in the Swiss. Many, perhaps a great number of them, which I estimated to be CF may just as well be C. Color-form and primary color interpretations merge so much in the Alorese that they are hard to differentiate. Therefore, the 30.6% primary C responses stated above are a minimum. In my Swiss material primary C occurs only twice among the males, amounting to 0.8% of all the color reactions. One of these two persons is a somewhat explosive character and the other shows a suppressed amount of hypersensitivity.

From the above-stated quantities an average of the findings can be made, which will be stated in a later section (see Variability and the Individual).

INTERPRETATION OF AFFECTIVITY

I turn now to the emotional life of the Alorese. The statements I am able to make about their emotional disposition are gathered first of all from their various kinds of color reactions and secondly from some factors with which the colors are interrelated.

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to the F+%, the W and their quality; the majority of the upper half ranks on the level of our morons. But, with regard both to the representations of emotional life and to the rest of the "intellectual" factors, the total of their findings is widely different from the average findings of our morons and feeble-minded, and the departures are the greater the nearer we come to the bottom of that order. Those remaining intellectual factors are the apperceptive type and the sequence, the percentages of animal interpretations (A%), and the original answers (O%). For the Alorese I counted as an original answer each response that occurs only once; among them, however, we find those responses that are most common in Europeans and Americans, i.e., the so-called popular answers. Only a few, apparently the most intelligent ones among these seventeen male Alorese, reach the level of our average intelligent with an IQ of about 85. At the top ranks Fantan the Interpreter (see later), and next to him Mangma the Chief and Johanis. Within the limits of this contribution I cannot say more about this problem; a full presentation of the Alorese intelligence would be a study in itself.

One remaining factor of the whole-part issue which has emotional significance is a special form of the Dd. It is the space figure interpretation by which the white portions of the pictures are interpreted. When these S coincide with many color reactions or better, with a predominance of these reactions over the movement answers, they express outgoing opposition or oppositional tendencies, like defiance, antagonism, argumentative behavior, and so forth. In the Alorese, even though they exhibit, in addition to the dominating black, a greater tendency to concentrate on the white color than is shown by the number of their S (there are white reactions other than S), these space figure interpretations are less frequent than in the normal Swiss (1:3), which is in conformity with the Alorese passive streak. Submission and opposition do not preclude each other but are not in tune with one another. The less frequent occurrence of S is another expression of the Alorese passive attitude.

VARIABILITY AND THE INDIVIDUAL

In this section I turn to the individual and some facts concerning the variability of the Alorese. Before giving blind diagnoses for some of them, I have to make a series of statements concerning the ways of getting at the individual's personality and psychological background.

It is obvious that statements of personality diagnosis must be based

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114 It is obvious that statements of personality diagnosis must be based
128 on a consideration of individual variations. These were neglected when we summed up the results of the findings for the purpose of making a statistical generalization such as I gave at the beginning in the section on the quantitative results.

In general the Alorese personality diagnoses are based on five different kinds of manifestations:

1. The quantity and proportion of the ordinary color reactions as produced by anyone to any color in the ten cards.

2. The black and white interpretations and their quantities.

3. The proportion between these black and white reactions and the true color responses.

4. The manifestations of the black color-shock.

5. The manifestations of suppression or repression where they occur.

In addition, there are the percentage and quality of the whole and small detail answers as well as the percentage of good forms and animal interpretations, which are both intellectual and emotional representations.

The individual's affectivity is a resultant of these reactions which are interrelated and which interfere with one another; there are as many individual shadings as there are different modes of experience (see later). For instance, the more black prevails over true color, the more passive is the individual's behavior and the more strongly stressed his attitude of passive acceptance. The more expressed the black color-shock, the more distrust and suspicion are characteristic of an Alorese or the more fearfulness and timidity are developed, depending on the card at which the shock occurs and at which it shows its greatest intensity. This is true even though there may be fewer black and white interpretations than in other individuals (see blind diagnoses of Mangma the Genealogist, Fantan the Interpreter, and the tumukun). Furthermore, it depends on the number of these black and white interpretations in proportion to the other color reactions and the intensity of the black color-shock whether a person is spiteful and resentful and to what extent, whether he is characterized by sweetness in his behavior and how much submissiveness and shyness exist, or how quickly he freezes and shrinks into himself after emotional outbursts. All this can be listed from the ethnographer's records.

X157 If I single out the normal details, the space figure interpretations (S), which cover or start from the white spots in the pictures, and the Do as interpretations by which only a part of an entity is interpreted (*pars pro toto*), the average findings for the seventeen male Alorese are:

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157 average for A%. Further, there are the manifestations of black color-shock which occur even in the absence of black-white reactions, as in the test of Mangma the Genealogist who, without those manifestations, might, among Europeans, be a case of "relative dementia" (Bleuler's *Verblödungsblödsinn*). There will always be some discrepancies and incongruities. One or other of the Alorese characteristics which were previously inferred from the total of their findings with regard to emotional life makes its appearance and takes effect on the test results.

114 I revert to the blind diagnoses. In working out a subject's personality we often meet a difficulty that I may term the "accent." The more one stresses one or the other element in the characterization, the more the result may depart from what the person seems to be in life. However, no more is needed than a shifting of the accent to obtain sufficient conformity. This is the case, for example, in Mangma the Genealogist, the second of the following blind diagnoses. It is quite possible that the characterization stresses too much the strikingly poor quality of his DW and too little their quantity. The quantity of his W must be an expression of his will power and vigor, which is not adequately set forth in this description where he is colored too much on the negative side as someone who soars too high and wants too much. The characterization, with its accent, may give too much the impression of a somewhat ridiculous personality who is found wanting, whereas the vigor that lies behind it is not sufficiently accentuated.

157 The same problem exists as to the characterization of what the 114 Alorese have in common. When we describe their passive acceptance, we accentuate the manifestations of this attitude and neglect those of their egocentricity, and vice versa, perhaps to such an extent that we are afterward amazed at the fact that the same people can develop the most selfish and even the most violent reactions. When we speak of their fearfulness and timidity, we forget, for the moment, that mechanisms of defense and self-protection exist, and we are astonished to see these people described later as being spiteful and resentful or even as acting very aggressively. Or, further, that tendency toward an easygoing way of life, which shirks great strain and effort and results in that playful, niggling fussiness, seems contradictory when, subsequently, a picture of a "beaten" and fully helpless being is presented. However, we need not be baffled. These reactions, in part, belong together and condition each other. They are, to some extent, independent of one another and alternate with one another in a continuous upsurging and downsweeping flux that is characteristic of the Alorese and must seem normal to them.

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In the blind diagnoses I put in parentheses references to the test findings from which a statement was drawn. The flow of characterization is inevitably disturbed by this procedure, but it is the only one by which such references can be made briefly. To infer a blind diagnosis from the findings in a perfectly conclusive way needs, not unlike the presentation of a psychoanalysis, a manuscript in itself (see my analysis of a single case in the *Zeitschrift für die gesamte Neurologie und Psychiatrie*, 1931). The scoring of the F, the Dd, and the original answers (O) was partly based on my experience with Europeans, partly on the ethnographer's statements. It is understood that this procedure is a mere expedient, but it proved practicable since the results which led to a ranking list of intelligence in the males were in keeping with the ethnographer's own list. The Roman numerals refer to the number of the card, and the letters, a, b, c, and d, to the position of the card at which an interpretation was produced, starting from the normal position (a) and turning a card clockwise in positions b, c, and d. Locations, which are always related to the normal position (a) of the card, are placed in parentheses. Questions or statements by the ethnographer are in brackets. Conf. means confabulation.

Rilpada the Seer, 35 Years of Age

I.	(1) is this a large cloud? (W)	WF(C)—	cloud	
	(2) a big cloud with a tree (middle figure) between the clouds	DF—	tree	
	(3) ears (top of side figures)	DdF—	A	
	(4) men (the headlike projections of the lower contour of side figures, a)	DdF+	Hd	
	(5) wings of a night bird (wings of side figures)	DoF+	Ad	
	(6) two men (each half of middle figure) are standing in a cloud	DM+	H	
II.	(1) a house (whole black plus central point) with	DF±	house	
	(2) the sun between (white space) and	SwhF—	sun	
	(3) flowers above the house (lateral red)	DCF—	plant	
	the white is the sun and			
	(4) the red are its rays when it rises (long projections of medial red)	DdF±	sunrays	
	(5) the black is not like clouds but like the sea	Dbl	sea	
III.	(1) these are evil spirits (the "waiters" without legs) and these (the legs) are their children	DF+	spirits	Conf.
	(2) these are boats (legs)	DF+	boats	
IV.	(1) a monkey (W)	WF+	A	
	(2) evil spirits (the snakelike appendixes)	DF—	spirits	
V.	(1) evil spirits (the bat's ears)	DdF—	spirits	
	(2) evil spirits (the lower projections)	DdF—	spirits	

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are all animal interpretations, and Tilapoda, who refers not once to animals among her 27 answers, though the animal interpretations are normally so frequent that the average A% of the normal Swiss amounts to 45.5. These two extremes mean a variation range of 100.

If we take the standard deviations of these thirty-seven Alorese as realities, the results of a comparison of the variation in the Alorese with that in the hundred Swiss by means of the variation coefficients (v) are given below. With two exceptions concerning the Dd and CF, the variations of the other factors are a half to three times greater in the Alorese—about a half greater for bl-wh2, C, and W, one and a half greater for A%, and three times greater for F+%.

	Alorese			Swiss		
	Average	σ	v	v	σ	Average
W	4.68	3.77	59.19	37.73	3.21	8.27
Dd	8.70	10.08	115.86	119.05	1.25	1.89
F+%	40.3	11.89	29.65	9.01	7.25	80.5
A%	40.9	24.90	60.88	54.51	11.15	45.6
CF	1.68	1.88	70.15	83.93	0.94	1.11
bl-wh2	3.58	3.90	108.95			
M				77.24	1.07	1.68
C	1.49	1.30	80.54			
FC				54.17	1.43	2.64

The Alorese bl-wh2 is confronted with the M of the normal Swiss whose FC is confronted with the primary C of the Alorese which do not occur in the normal Swiss. It results that the "norm" of the Alorese has a much wider base line and therefore covers much wider range possibilities. We learn—it is nothing new—that the European *sive* Swiss "norm" and the "norm" of the Alorese do not coincide; Alorese and Europeans *sive* Swiss are quite different in nature and caliber. How much the actual variability of the Alorese is greater or smaller cannot be determined on the basis of thirty-seven variants only.

The factors that we have used are not the only ones which Rorschach's experiment offers. There are others mentioned only in passing or not at all, which embrace other psychic qualities. No less than eleven components of intelligence are deducible from the percentage of good forms, the whole answers, the apperceptive type and sequence, the variability of interpretations, the percentage of animal and original answers, the kinesthesias, and the reaction time. Most of these factors

1:Du Bois E-5 (1938-1939) 1944
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are expressed by figures, and in 1 FC, i.e., one of those factors which are the representations of emotional life, we are confronted with a quantity that has a sort of unit-value since it is a minimum exhibited by a normal European, though apparently not by every American. The surplus of this 1 FC gives the variation range of emotional responsiveness which can be compared to that of other population groups. Two other factors that are never absent in a test are the D and F, the normal details and form interpretations. They are the two factors the average percentages of which differ in no way in the Alorese and normal Swiss (see at the beginning "Quantitative Results of the Test Findings"). They seem to be "neutral."

157 The variation series of the factors which are most vital for Alorese psychology, the W, Dd, F+%, A%, C∑, and bl-wh∑ are skewed or completely one-sided and that of the A% presents perhaps two peaks. It also seems to be so in the normal Swiss; only their W series is binomial, as demonstrated by the following series:

AVERAGE = 8.27 ± 0.31

number of W:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
number of individuals:	0	0	1	4	8	6	12	10	15	11	11	5	7	5	2	1	1	1	
	0	0	1	5	13	19	31	41	56	67	78	83	90	95	97	98	99	100	

$q_1 = 6.50$ $q_3 = 10.73$

The quartile (Q) is 2.115 and the standard deviation, as stated above, 3.12; therefore $Q : \sigma = 0.6778$ instead of the theoretical 0.6745.

SEX DIFFERENCES

153 The Alorese show a deficiency of whole answers. Of their 1201 responses there are only 14.4% W to 30.5% W in the normal Swiss. Furthermore, no fewer than 114 of their 173 W are bad, as against only 155 of 827 W in the Swiss, equaling 65.9% and 18.7% W— respectively. A great number of these W— are confabulated, i.e., they are DW which do not occur in normal Europeans. Finally, the combinatory W, i.e., the combination of the various picture parts (see Fanean's interpretation at V), which are mostly WM in Europeans and the expression of true imagination, are entirely missing in the Alorese. It is the quality of the Alorese W rather than their inferiority in number which makes the big difference.

On the other hand, the Alorese produce more than four times as many Dd as the normal Swiss, 26.8% : 6.1%. As bad as this appercep-

2: DuBois E-5 (1938-1939) 1941 OFS Alor OFS

ATTITUDES TOWARD FOOD AND HUNGER IN ALOR

By CORA DU BOIS

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DR. SAPIR'S great respect for the subtlety and complexity of human beings acted as a sobering influence on the growing interest of anthropologists in psychology and upon the contributions they made to social psychology. As an anthropologist he minimized in no way the tremendous power of society in shaping people but he never permitted his interests as a social scientist to blind him to the infinite variety of individuals within a culture. He went even further and in conversation, at least, would support the probability of innate personality types. This sound caution against the environmentalists' inclination to overvalue conditioning was a great advantage to his students. At the same time he laid full stress on studying the socialization of the child.

It seems possible to combine these two principles in a preliminary and tentative fashion by making certain assumptions, following certain methods of reasoning and thereby arriving at certain generalizations about people within a given cultural framework, without at any time denying that the processes and symbols are going to have tremendously different values in the total economy of the individuals involved. It is with this in mind that I should like to discuss attitudes developed toward food and hunger in a particular culture.

It can be reasonably assumed that all human beings have certain physiologically determined tensions. One of the most obvious of these is hunger. But nowhere do human beings discharge this or any other basic tension directly. All societies have devices whereby such tensions are delayed, redirected, and often elaborated. To acquire these devices children everywhere must be subject to disciplines. Such disciplines may be of various types and undoubtedly the question deserves close comparative study. For our purposes it will suffice to point out that they may be permissive, restrictive, or absorptive. By permissive disciplines are meant those by which children are encouraged to acquire certain behaviors through a variety of immediate or delayed rewards. By restrictive disciplines are meant those which definitely deny the child certain types of activity by punishments ranging from physical violence to withdrawal of approval. The absorptive disciplines are those not consciously imparted, as are the permissive and restrictive, but rather those behavior patterns so consistently observed in other members of the group that the child acquires them by a kind of psychic osmosis.

It is important to stress that a single discipline of childhood or a single traumatic experience is rarely sufficient in itself to set cultural personality types. Repeated experiences in different behavioral, value, and institutional contexts alone will create personality constellations of such force and consistency that they may become apparent to ethnologists who,

2: DuBois E-5 (1938-1939) 1941 OF5 Alor OF5

with the best will in the world, can never have more than a superficial insight into peoples of an alien culture.[1]

Lastly, there is so far no very definite knowledge of what ego mechanisms will be employed by the individual in reacting to frustrations associated with different kinds of disciplines and discipliners. However, from the psychoanalysts and the psychiatrists there is a growing insight into personality processes like projection, introjection, sublimation, and so on. I assume these processes to be universal to mankind, although I should expect variations in weighting from culture to culture.[2]

The procedure, therefore, is to consider a basic physiological tension, see how it is acted upon by disciplines of childhood, what repetitions it finds in a variety of contexts and how it is crystallized by (or into) institutional behavior through those personality mechanisms I have assumed to be universal to mankind.

Hunger, as one of the basic and obvious tensions of human beings, everywhere subject to delayed, redirected, and elaborated gratifications, suggests itself as a point of departure for testing the procedure outlined above. The people used for this purpose are the Atimelangers, who belong to a cluster of five mountain villages on the island of Alor in the Netherlands East Indies.[3]

The experiences of the Atimelang child with hunger and food are to be considered first. Immediately after birth the mother takes the child in her arms and offers it the breast to suckle at will. From four to six days after birth the mother remains in the house with the infant rather constantly in her arms. When the umbilical cord has dried and dropped off, the mother and child leave the house for the first time and from then onward the child is offered in addition to its mother's milk many different kinds of premasticated foods and vegetable gruels. Any refusal of the child to nurse freely and frequently when opportunity offers during this first period of life is considered a serious symptom of ill health and gives rise to considerable concern in parents. After the first week the child is given adult diet as fast as it will take it, and a child of about eighteen months can often be seen at a feast alternately nursing and sucking a cube of boiled pork fat.

Since, however, women are primarily responsible for garden work and the subsistence economy of the Atimelangers, they return to regular field work often ten days to two weeks after the birth of a child. It is not customary for the mother to work with the child on her back or even near her, as it is in some societies, so the infant is left at home in the care of some kin, usually the father or older sibling. There is great variation in solicitude and effectiveness of feeding care received by infants from these substitute mothers. Also some wom-

[1] I am indebted to Dr A. Kardiner and some of his colleagues for their insistence on the need of repetition in many contexts to set certain personality trends.

[2] For a discussion of these mechanisms see Anna Freud, *The Ego and the Mechanisms of Defence* (London, 1937).

[3] The material used in this article was collected by the writer during eighteen months of residence on the island of Alor, extending from January 1938 through June 1939. Acknowledgments are gratefully made to the Social Science Research Council of Columbia University and to Dr A. Kardiner who made this work possible.